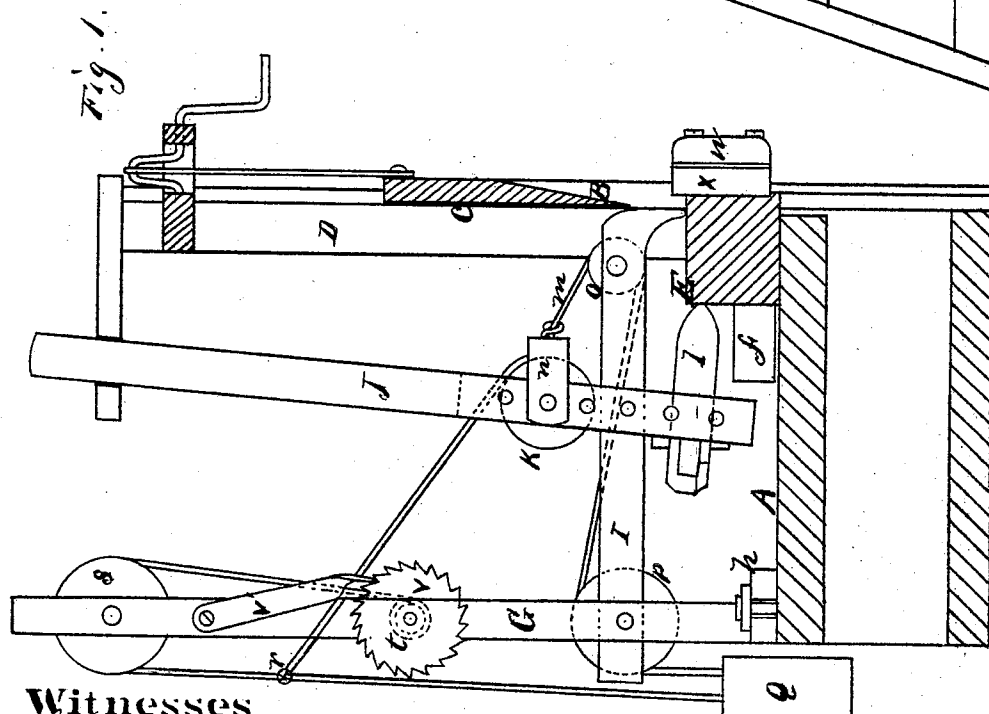
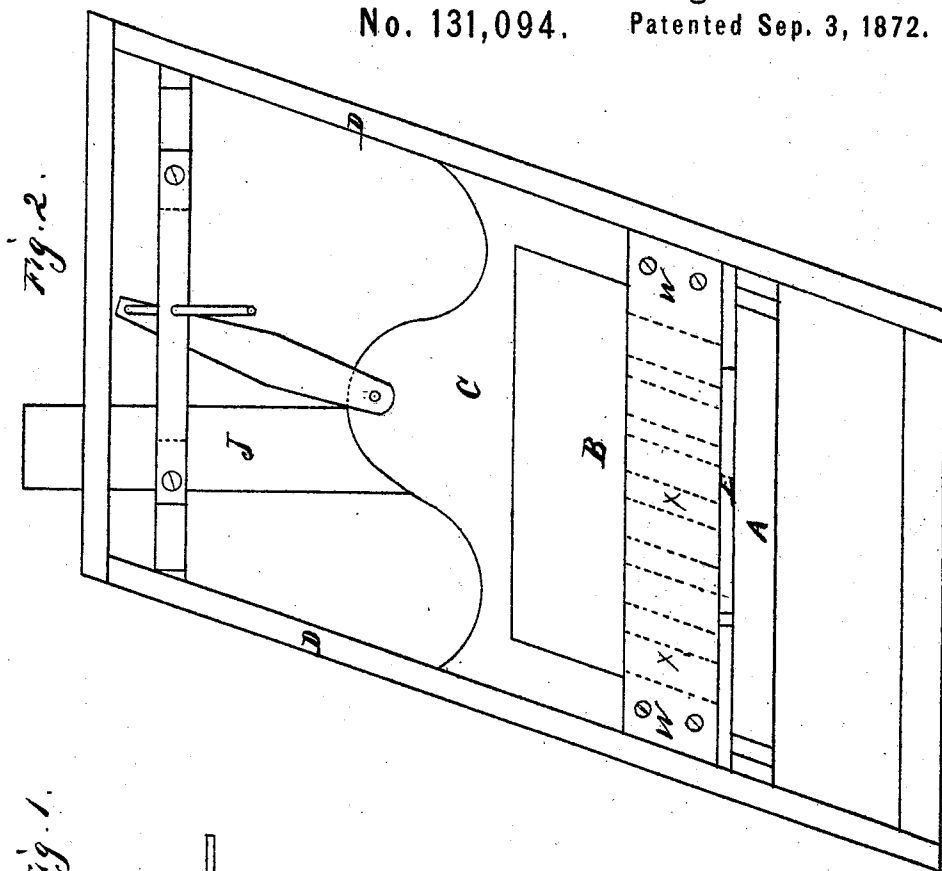


E. S. GILMORE.



Witnesses

J. L. Boone
O. W. Richardson

O. W. Richardson

Inventor

Inventor
Elijah I. Gilmore
per Sewey &
attys

per Sewey to
Atkins

Atlys

UNITED STATES PATENT OFFICE.

ELIJAH STONE GILMORE, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN MACHINES FOR CUTTING VENEERS.

Specification forming part of Letters Patent No. 131,094, dated September 3, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, ELIJAH S. GILMORE, of city and county of San Francisco, State of California, have invented Improvements in Machines for Cutting Veneers; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to certain improvements in machines for cutting or slicing off thin veneers or strips from a previously-prepared block of wood; and it consists, principally, of a device for automatically feeding said block to the cutting-knife without requiring the attention of the operator.

In order to more fully illustrate and explain my invention reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side sectional elevation. Fig. 2 is a front view.

A is the table or bench upon which the block to be cut is placed, and B is the knife, which is secured in a frame, C, said frame being arranged to move up and down between two guides or posts, D D. In the usual working of these knives the block is held in place by dogs at each end, and the frame upon which it is secured is moved forward, so as to feed the block to the knife by an ordinary pawl and ratchet operated by the drop of the knife. Usually I shall construct the top of the table or bench A so that it can be adjusted to any desired angle in either direction, so as to permit the block to be presented to the knife in any desired position. This I have not shown. E represents the block which is to be cut into veneers. This block rests upon the table A, and, in order to steady it, I employ at each side of the table a slotted plate, *f*, the inner edge of which is turned up, so as to present a vertical side strip, the two opposite strips forming a guide, between which the block moves. These plates *f* can be adjusted to and from each other in order to accommodate different-size blocks. To the rear edge of the table I secure a vertical standard,

G, by means of a horizontal foot-piece or timber, *h*. The ends of this foot-piece are slotted longitudinally, and bolts pass through the slots into the table, so that the vertical post can be shifted from side to side in order to keep it opposite the center of the block E. The standard G is slotted nearly its entire length, and has secured in this slot one end of a horizontal drop-bar, I, at the proper height to allow its opposite end to rest upon the upper side of the block just in the rear of the knife. J is a timber, the upper end of which passes loosely through a hole or opening in the upper end of the frame, while its lower end is slotted so as to permit it to straddle the horizontal drop-bar I. A roller, K, is secured in this slot, so that the roller will rest on the drop-bar while the weight of the timber bears upon the roller. The rear end of the drop-bar I, as well as the roller K, may be adjusted up and down, as required by the thickness of the block E. Below the bar I a presser-foot, *l*, is secured to the lower end of the timber J, so that it will rest upon the block E, as shown. A cord, *m*, has one end secured to a yoke, *n*, on the timber J, just above the drop-bar I, and passes forward over a pulley, *o*, in the forward end of the drop-bar; thence back over a pulley, *p*, in the rear end of the drop-bar where a weight, Q, is attached to it. Thus it will be seen that the weight is continually pulling the lower end of the timber J forward, and causing it to press the block against the knife. In order to relieve this pressure when desired, another cord, *r*, or, if desired, an extension of the same cord, is carried from the yoke *n* up over a pulley, *s*, at the upper end of this standard G, and then down to a shaft, *t*, to which it is secured. This shaft can be turned by a crank, so as to withdraw the lower end of the timber J, and be held in this position by a ratchet, *v*, and pawl *v'*, while the block is being replaced or adjusted. To gage the thickness of the veneer or slice to be cut, I secure to the outside of the frame in which the knife is held, and below the knife, a transverse timber, *w*. This timber is held in place by screws, so that it can be moved to or from the knife, according to the thickness which it is desired to cut the veneers or slices. Usually I shall place vertical strips *x x* a short distance apart on

the inside of the timber *w*, against which the block *E* can bear, the spaces between them serving to carry away or release any chips which may be detached from the block; but these strips can be dispensed with, as desired.

Now, when the knife is lifted, the weight *Q* causes the lower end of the timber *J* to immediately press forward the block *E* against the timber *w*, which gives the desired thickness of the veneer or slice. The descending knife then splits off the veneer in the usual way.

By this means I greatly improve the present veneer-cutting machine, rendering it automatically feeding, and capable of doing a greater amount of work in a more perfect manner and with a less amount of trouble.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. The weight *Q*, in combination with the cord *m*, pulleys *s o p*, and sliding timber *J*, substantially as and for the purpose above described.

2. The adjustable vertical standard *G* and pivoted drop-bar *I*, in combination with the timber *J*, with its roller *K* and presser-foot *l*, and the operating weight *Q*, substantially as and for the purpose above described.

In witness whereof I hereunto set my hand and seal.

ELIJAH STONE GILMORE. [L. s.]

Witnesses:

J. L. BOONE,

C. M. RICHARDSON.